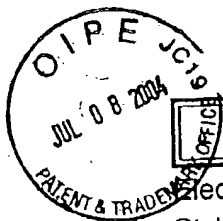


JACKET			
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	<u>p</u> PTO-1449
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

E-5 (Rev. 10/01/02)



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
Stylesheet Version v18.0

Title of Invention	Waferless fiber fabry-perot filters																																																																																																				
<div>Application Number: 10/686934</div> <div>Confirmation Number: 4564</div> <div>First Named Applicant: Yufei Bao</div> <div>Attorney Docket Number: 113-02</div> <div>Search string: (6115122 or 6044189 or 5896193 or 5892582 or 5838437 or 5591965 or 5563973 or 5513913 or 5509093 or 5426297 or 5425039 or 5422970 or 5410404 or 5401956 or 5397891 or 5380995 or 5375181 or 5289552 or 5212746 or 5212745 or 4996419 or 4806012 or 5615224 or 5682237 or 5694503 or 5841920 or 5732169 or 4848499 or 4892388 or 4923273 or 5062684 or 5073004 or 5115441 or 5181213 or 5301201 or 5305336 or 5397739 or 5422470 or 5530715 or 5666373 or 5042898 or 5361130 or 5227857 or 6241397 or 6137812 or 5237630 or 5146527 or 5007705 or 5367589 or 5469520),pn.</div> <div>US Patent Documents</div> <div>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</div> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td></td><td>1</td><td>6115122</td><td>2000-09-05</td><td>Bao</td><td></td><td></td><td></td></tr><tr><td></td><td>2</td><td>6044189</td><td>2000-03-28</td><td>Miller</td><td></td><td></td><td></td></tr><tr><td></td><td>3</td><td>5896193</td><td>1999-04-20</td><td>Colbourne</td><td></td><td></td><td></td></tr><tr><td></td><td>4</td><td>5892582</td><td>1999-04-06</td><td>Bao</td><td></td><td></td><td></td></tr><tr><td></td><td>5</td><td>5838437</td><td>1998-11-17</td><td>Miller</td><td></td><td></td><td></td></tr><tr><td></td><td>6</td><td>5591965</td><td>1997-07-01</td><td>Udd</td><td></td><td></td><td></td></tr><tr><td></td><td>7</td><td>5563973</td><td>1996-10-08</td><td>Miller</td><td></td><td></td><td></td></tr><tr><td></td><td>8</td><td>5513913</td><td>1996-05-07</td><td>Ball</td><td></td><td></td><td></td></tr><tr><td></td><td>9</td><td>5509093</td><td>1996-04-16</td><td>Miller</td><td></td><td></td><td></td></tr><tr><td></td><td>10</td><td>5426297</td><td>1995-06-20</td><td>Dunphy</td><td></td><td></td><td></td></tr><tr><td></td><td>11</td><td>5425039</td><td>1995-06-13</td><td>Hsu</td><td></td><td></td><td></td></tr></tbody></table>						init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass		1	6115122	2000-09-05	Bao					2	6044189	2000-03-28	Miller					3	5896193	1999-04-20	Colbourne					4	5892582	1999-04-06	Bao					5	5838437	1998-11-17	Miller					6	5591965	1997-07-01	Udd					7	5563973	1996-10-08	Miller					8	5513913	1996-05-07	Ball					9	5509093	1996-04-16	Miller					10	5426297	1995-06-20	Dunphy					11	5425039	1995-06-13	Hsu			
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	26	5841920	1998-11-24	Lemaire
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	28	4848499	1989-07-18	Martinet
	29	4892388	1990-01-09	Taylor
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	36	5305336	1994-04-19	Adar
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	39	5530715	1996-06-25	Shieh
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	49	5367589	1994-11-22	MacDonald
	50	5469520	1995-11-21	Morey

Signature


Examiner Name	Date



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Electronic Version v18

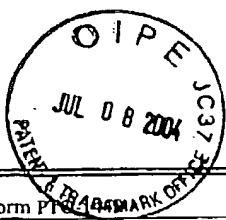
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US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5703978	1997-12-30	DiGiovanni			
	2	5721802	1998-02-24	Francis			
	3	6529661	2003-03-04	Kropp			
	4	6671432	2003-12-30	Imada			
	5	5381500	1995-01-10	Edwards			
	6	5159655	1992-10-27	Ziebol			
	7	5179608	1993-01-12	Ziebol			
	8	5650856	1997-07-22	Morse			
	9	5050949	1991-09-24	DiGiovanni			
	10	6263002	2001-07-17	Hsu			
	11	6449047	2002-09-10	Bao			
	12	6504616	2003-01-07	Haber			
US Published Applications							
Note: Applicant is not required to submit a paper copy of cited US Published Applications							
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	1	20030076505	2003-04-24	Bao
Signature				
Examiner Name			Date	



Sheet 1 of 10

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APPLICANT: Bao et al.		GROUP: 2828

U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	6,449,047	09/10/02	Bao et al.	356	478	11/12/99
	6,445,838	09/03/02	Caracci et al.	385	14	09/29/00
	6,137,812	10/24/00	Hsu et al.	372	6	02/25/97
	6,113,469	09/05/00	Yoshikawa et al.	451	41	04/21/99
	6,097,530	08/01/00	Asher et al.	359	288	03/10/99
	5,887,099	03/23/99	Csipkes et al.	385	56	10/03/97
	5,796,894	08/18/98	Csipkes et al.	385	56	11/21/96
	5,739,945	04/14/98	Tayebati	359	291	09/27/96
	5,425,039	06/13/95	Hsu et al.	372	6	02/24/94
	5,375,181	12/20/94	Miller et al.	385	27	10/13/93
	5,359,687	10/25/94	McFarland et al.	385	49	08/23/93
	5,283,845	02/01/94	Ip	385	24	07/20/92
	5,251,275	10/05/93	Kuriyama et al.	385	14	05/08/92
	5,037,180	08/06/91	Stone	385	123	07/19/90
	5,037,176	08/06/91	Roberts et al.	385	16	01/19/90
	5,027,435	06/25/91	Chraplyvy et al.	455	617	01/27/89
	5,024,505	06/18/91	Junji et al.	350	96.22	02/05/90
	4,861,136	08/29/89	Stone et al.	350	96.3	07/15/87
	4,830,451	05/16/89	Stone	350	96.15	03/05/86
	4,482,248	11/13/84	Papuchon et al.	356	346	02/17/83
	3,984,190	10/05/76	Barrett et al.	356	75	11/26/74

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No
	0 457 484 A2	11/21/91	EP	G02B 6/26		
	0 437 963 A2	07/24/91	EP	G01J 3/26		
	0 721 121 A1	07/10/96	EP	G02B 6/293	B02B 6/34	Abstract only
	0 903 615 A2	03/24/99	EP	G02F 1/21	G02F 1/1333	
	1 016 884 A2	07/05/00	EP	G02B 6/28	H04J 14/02	
	WO 98/17968	04/30/98	PCT	G01B 9/02		
	WO 98/27446	06/25/98	PCT	G02B		
	WO 99/34484	07/08/99	PCT	H01S		
	WO 00/28355	05/18/00	PCT	G02B 6/00		

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

		Arya, V. et al. "Temperature Compensation Scheme for Refractive Index Grating-Based Optical Fiber Devices," SPIE 2594:52-59
		Arya, V. et al. (1997), "Application of Thin-Film Optical Filters to the Temperature Compensation of Optical Fiber Grating-Based Devices," IEEE Trans Instrum. Measurement 46(5):1173-1177
		Ball, G.A. and Morey, W.W., (Dec 1994), "Compression-tuned single-frequency Bragg grating fiber laser," Optics Letters 19(23):1979-1981.
		Barnes et al., (Sept 1989), "High-quantum-efficiency Er ³⁺ fiber lasers pumped at 980 nm," Optics Letters 14(18):1002-1004
		Barnes et al. (1989), "Q-switching in fibre lasers," Fiber Laser Sources and Amplifiers Proc. SPIE 1171:302-308
		Bellemare et al. (Feb 1999), "Multifrequency Erbium-Doped Fiber Ring Lasers Anchored on the ITU Frequency Grid," Optical Fiber Communications (OFC/IOOC'99) Feb. 21 - 26, 1999, San Diego, CA 1:16-18
		Bird et al., (1991), "Narrow line semiconductor laser using fibre grating," Electron Lett. 27:1115-1116
		Boucher, R. et al. (1992), "Calibrated Fabry-Perot etalon as an absolute frequency reference for OFDM communications," IEEE Photonics Technol. Lett. 4:801-803

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

		Farries, M.C. et al. (1998), "Hybrid DWDM devices utilizing dielectric filters and fiber Bragg gratings," OFC '98 Optical Fiber Communication Conf. and Exhibit, Technical Digest Series, Vol. 2, Feb. 22-27, 1998, San Jose, CA, pp. 234-235
		Foote, P.D. (1994), "Fibre Bragg Grating Stain Sensors for Aerospace Smart Structures," Second European Conf. on Smart Structures and Materials, Glasgow, U.K., session 8, p. 290-293
		Friebele, E.J. et al. (1994), "Fiberoptic Sensors measure up for smart structures," Laser Focus World, (May), pp. 165-169
		Gamache et al. (Feb 1996), "An Optical Frequency Scale in Exact Multiples of 100 GHz for Standardization of Multifrequency Communications," <i>IEEE Photon. Technol. Lett.</i> 8(2):290-292
		Gehrsitz, S. et al. (Aug. 1997), "Tandem Triple-Pass Fabry-Perot Interferometer for Applications in the Near Infrared," <i>Appl. Opt.</i> (36):5355-5361.
		Giles et al., (Aug 1994), "Reflection-induced changes in the optical spectra of 980 nm QW lasers," <i>IEEE Photonics Technology Lett</i> 6(8):903-906
		Giles et al., (Aug 1994), "Simultaneous wavelength-stabilization of 980 nm pump lasers," <i>IEEE Photonics Technology Lett.</i> 6(8):907-909
		Glance, B.S. et al. (1988), "Densely spaced FDM coherent star network with optical signals confined to equally spaced frequencies," <i>IEEE J. Lightwave Technol.</i> LT-6:1770-1781
		Hammon, T.E. and Stokes, A.D. (1996), "Optical fibre Bragg grating temperature sensor measurements in an electrical power transformer using a temperature compensated optical fibre Bragg grating as a reference," Eleventh Int'l. Conf. on Optical Fiber Sensors - Advanced Sensing Photonics, Part Vol. 1, pp. 566-569 (Abstract Only)
		Henriksson, A. et al. (1996), "Temperature insensitivity of a fiber optic Bragg grating sensor," <i>Proc. SPIE</i> 2839:20-33
		Hsu, K. and Miller, C.M., (June 1994), "Single-mode tunable erbium:ytterbium fiber Fabry-Perot microlaser," <i>Optics Letters</i> 19(12):886-888
		Hsu, K. and Miller, C.M., (Feb 1995), "Continuous and discrete wavelength tuning in Er:Yb fiber Fabry-Perot lasers," <i>Optics Letters</i> 20(4):377-379
		Humblet, P.A. et al. (Aug. 1990), "Crosstalk Analysis and Filter Optimization of Single-and Double-Cavity Fabry-Perot Filters," <i>IEEE J. on Selected Areas in Communications</i> 8(6):1095-1107.
		Iwashima, T. et al. (1997), "Temperature compensation technique for fibre Bragg gratings using liquid crystalline polymer tubes," <i>Electron. Lett.</i> 33(5):417-419

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

		Ja, Y.H. (Sept. 1995) "Optical Vernier Filter with Fiber Grating Fabry-Perot Resonators," <i>Appl. Opt.</i> 34(27):6164-6167.
		Kaminow, I.P. et al. (1989), "A Tunable Vernier Fiber Fabry-Perot Filter for FDM Demultiplexing and Detection," <i>IEEE Photonics Technol. Lett.</i> 1(1):24-26.
		Kersey, A.D. (1993), "Fiber-optic Bragg grating strain sensor with drift-compensated high-resolution interferometric wavelength-shift detection," <i>Opt. Lett.</i> 18(1):72-74
		Kersey, A.D. et al. (1993), "Multiplexed fiber Bragg grating strain-sensor system with a fiber Fabry-Perot wavelength filter," <i>Opt. Lett.</i> 18:1370-1372
		Kersey, A.D. et al. (1995), "Development of Fiber Sensors for Structural Monitoring," <i>SPIE</i> 2456:262-268
		Kersey, A.D. (1996), "Interrogation and Multiplexing Techniques for Fiber Bragg Grating Strain-Sensors," Optical Sciences Division, Naval Research Laboratory (NRL) code 5674, distributed by NRL at SPIE Meeting, Fall 1996, (Denver, CO)
		Krüger et al. (Apr 1997), "Quasicontinuous Tunable Fiber-Ring Laser Applied as Local Oscillator in an Absolute Calibrated Spectrometer for WDM Systems," <i>J. Lightwave Technol.</i> 15:628-635
		Liu, Y. et al. (1997), "Temperature insensitive fiber grating," <i>Chinese J. of Lasers</i> 24(10):895-898 (Abstract Only)
		Lindsay, S.M. et al. (1981) "Construction and Alignment of a High Performance Multipass Vernier Tandem Fabry-Perot Interferometer," <i>Rev. Sci. Instrum.</i> 52(10):1478-1486.
		Lemieux, J-F. Et al. (May 1999), "Step-tunable (100GHz) Hybrid Laser Based on Vernier Effect Between Fabry-Perot Cavity and Sampled Fibre Bragg Grating," <i>Electron. Lett.</i> 35(11):904-906.
		Lemieux, J-F. et al. (July 1999), "100 Ghz Frequency Step-Tunable Hybrid Laser Based on a Vernier Effect Between Fabry-Perot Cavity and Sampled Fibre Bragg Grating." <i>OSA Trends in Optics and Photonics. Advanced Semiconductor Lasers and Their Applications</i> , Vol. 31, from the Topical Meeting Editor(s): Hollberg, L. and Lang, R.J., Optical Soc. America, Washington, DC, USA, pp. 186-188.
		Liou et al. (Dec 1998), "A 24-Channel Wavelength-Selectable Er-Fiber Ring Laser with Intracavity Waveguide-Grating-Router and Semiconductor Fabry-Perot Filter," <i>IEEE Photon. Technol. Lett.</i> 10(12):1787-1789

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

		Martin, J. et al. (1997), "Use of a sampled Bragg grating as an in-fiber optical resonator for the realization of a referencing optical frequency scale for WDM communications," Optical Fiber Communication Conference OFC-97, Technical Digest, paper Th15, pp. 284-285
		Miller, C.M. et al. (1992), "Wavelength-Locked, Two-Stage Fibre Fabry-Perot Filter for Dense Wavelength Division Demultiplexing in Erbium-Doped Fibre Amplifier Spectrum," Electron. Lett. 28(3):216-217.
		Nyman, B., (Sept 1998), "Four Measurement Methods Characterize WDM Components," Optoelectronics World, pp. 527-532
		Olsson et al., (Feb 1985), "Chirp-free transmission over 82.5 km of single mode fibers at 2 Gbit/s with injection locked DFB semiconductor lasers," J. Lightwave Technology LT-3(1):63-66
		Oretga, B. et al. (July 1999), "Wavelength Division Multiplexing All-Fiber Hybrid Devices Based on Fabry-Perot's and Gratings," J. Lightwave Technol. 17(7):1242-1247.
		Park et al. (Nov 1991), "All Fiber, low threshold, widely tunable single-frequency, erbium-doped fiber ring laser with a tandem fiber Fabry-Perot filter," Appl. Phys. Lett. 59:2369-2371
		Park et al. (June 1993), "Frequency locking of an erbium-doped fiber ring laser to an external fiber Fabry-Perot resonator," Optics Lett. 18(11):879-881
		Poulsen, C.V. and Sejka, M. (June 1993), "Highly Optimized Tunable Er ³⁺ -Doped Single Longitudinal Mode Fiber Ring Laser, Experiment and Model," IEEE Photonics Technol. Lett. 5:646-648
		Rao, Y-J. and Jackson, D.A. (1996), "Universal Fiber-Optic Point Sensor System for Quasi-Static Absolute Measurements of Multiparameters Exploiting Low Coherence Interrogation," J. Lightwave Technol. 14(4):592-600
		Rao, Y-J. (1996), "Strain sensing of modern composite materials with a spatial-wavelength-division multiplexed fiber grating network," Opt. Lett. 21(9):683-685
		Sakai, T. et al. (1992), "Frequency stabilization of laser diodes using 1.51-1.55 μ m absorption lines of ¹² C ₂ H ₂ and ¹³ C ₂ H ₂ ," IEEE J. Quant. Electron. 28:75-81
		Stone, J. and Marcuse, D. (1986), "Ultrahigh finesse fiber Fabry-Perot interferometers," IEEE J. Lightwave Technol. LT-4:382-385
		Stone J. et al. (1987) Elect. Lett. 23(15):781-783.

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

		Wyatt et al., (1982), "Megahertz linewidth from a 1.5 μ m semiconductor laser with HeNe laser injection," <i>Electron. Lett.</i> 18:292-293
		Yamashita et al., (Aug 1997), "Miniature erbium:ytterbium fiber Fabry-Perot multiwavelength lasers," <i>IEEE J. Selected Topics in Quantum Electronics</i> 3(4):1058-1064
		Yamashita, S. and Cowle, G.J., (Sept 1998), "Single-polarization operation of injection locked fiber DFB lasers," CTuF6 European Conference on Lasers and Electro-Optics '98, Glasgow, Scotland, September 13-18, 1998
		Yamashita, S. and Cowle, G.J., (Mar 1999), "Single-polarization operation of fiber distributed feedback (DFB) lasers by injection locking," <i>J. Lightwave Technology</i> 17(3):509-513
		Yoffe, G.W. et al. (1995) "Passive temperature-compensating package for optical fiber gratings" <i>Applied Optics</i> 34(30):6859-6861
		Yoffe, G.W. et al. "Temperature-compensated optical-fiber Bragg gratings" <i>OFC '95 Technical Digest</i> , W14-pp. 134-135
		Yoffe, G.W. et al. (1994), "Temperature-Compensating Mounts for Optical Fibre Bragg Gratings" <i>ACOFT '94</i> , pgs. 262-265
		Yun et al., (June 1998), "Interrogation of Fiber Grating Sensor Arrays with a Wavelength-swept Fiber Laser," <i>Optics Letters</i> 23(11):843-845
		Zervas, M.N. and Giles, I.P., (1989), "Optical-fibre surface-plasmon-wave polarisers with enhanced performance," <i>Electron. Lett.</i> 25:321-323
		Zhang et al. (Jan 1996), "Stable Single-Mode Compound-Ring Erbium-Doped Fiber Laser," <i>IEEE J. Lightwave Technol.</i> 14 (1):104-109

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Form PTO-1449		
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U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	5,007,705	04/16/91	Morey et al.	350	96.29	
	5,042,898	08/27/91	Morey et al.	385	37	
	5,367,589	11/22/94	MacDonald et al.	385	37	
	5,469,520	11/21/95	Morey et al.	385	37	
	5,602,949	02/11/97	Epworth	385	37	
	5,694,503	12/02/97	Fleming et al.	385	37	
	5,841,920	11/24/98	Lemaire et al.	385	37	
	5,892,582	04/06/99	Bao et al.	356	345	
	5,978,539	11/02/99	Davies et al.	385	129	
	5,991,483	11/23/99	Engelberth	385	37	
	5,999,671	12/07/99	Jin et al.	385	37	
	6,044,189	03/28/00	Miller	385	37	
	6,115,122	09/05/00	Bao et al.	356	345	
	6,181,851	01/30/01	Pan et al.	385	37	
	6,229,827	05/08/01	Fernald et al.	372	112	
	6,240,220	05/29/01	Pan et al.	385	13	
	6,327,036	12/04/01	Bao et al.	356	480	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No
	WO 98/17968	04/30/98				
	WO 98/27446	06/25/98				
	WO 00/07047	02/10/00				
	WO 00/39617	07/06/00				

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

	Ball and Morey (Dec. 1994), "Compression-tuned single-frequency Bragg grating fiber laser," Opt. Lett. 19(23): 1979-1981.
	Hill and Meltz (Aug. 1997), "Fiber Bragg grating technology fundamentals and overview," J. Lightwave Technology 15(8): 1263-1276.
	Iocco et al. (Sept. 1998), "Tension and compression tuned Bragg grating filter," Proc. ECOC '98, vol.1: 229-230.
	Iocco et al. (July 1999), "Bragg grating fast tunable filter for wavelength division multiplexing," J. Lightwave Technology 17(7): 1217-1221.

EXAMINER	DATE CONSIDERED
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	4,806,012	02/21/89	Meltz et al.	356	32	
	4,848,999	07/18/89	Taylor	65	4.3	
	4,892,388	01/09/90	Taylor	350	320	
	4,923,273	05/08/90	Taylor	350	96.21	
	4,996,419	02/26/91	Morey	250	227.18	
	5,062,684	11/05/91	Clayton et al.	385	27	
	5,073,004	12/17/91	Clayton et al.	385	27	
	5,212,745	05/18/93	Miller	385	25	
	5,212,746	05/18/93	Miller et al.	385	25	
	5,227,857	07/13/93	Kersey	356	345	
	5,289,552	02/22/94	Miller et al.	385	73	
	5,361,130	11/01/94	Kersey et al.	356	345	
	5,375,181	12/20/94	Miller et al.	385	27	
	5,380,995	01/10/95	Udd et al.	250	227.18	
	5,397,891	03/14/95	Udd et al.	250	227.18	
	5,410,404	04/25/95	Kersey et al.	356	345	
	5,401,956	03/28/95	Dunphy et al.	250	227.18	
	5,422,970	06/06/95	Miller et al.	385	72	
	5,426,297	06/20/95	Dunphy et al.	250	227.23	
	5,509,093	04/16/96	Miller et al.	385	27	
	5,513,913	05/07/96	Ball et al.	374	120	
	5,563,973	10/08/96	Miller et al.	385	81	
	5,591,965	01/07/97	Udd	250	227.18	

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

		Boucher, R. et al. (1992), "Calibrated Fabry-Perot Etalon as an Absolute Frequency Reference for OFDM Communications," IEEE Photon. Tech. Lett. 4(7):801-803
		Davis, M.A. and Kersey, A.D. (1995), "Matched-filter interrogation technique for fibre Bragg grating arrays," Electron. Lett. 31(10):822-823
		Davis, M.A. and Kersey, A.D. (1994), "All-fibre Bragg grating strain-sensor demodulation technique using a wavelength division coupler," Electron. Lett. 30(1):75-77
		Dunphy, J. et al. (1993), "Instrumentation development in support of fiber grating sensor arrays," Proc. of the SPIE V. 2071, pp. 2-11
		Foote, P.D. (1994), "Fibre Bragg Grating Strain Sensors for Aerospace Smart Structures," Second European Conf. on Smart Structures and Materials, Glasgow, Session 8, pp. 290-293
		Friebele, E.J. and Kersey, A.D. (1994), "Fiberoptic sensors measure up for smart structures," Laser Focus World, pp. 165-169
		Gamache, C. et al. (1996), "An Optical Frequency Scale in Exact Multiples of 100 GHz for Standardization of Multifrequency Communications," IEEE Photon. Tech. Lett. 8(2):290-292
		Glance, B.S. et al. (1988), "Densely Spaced FDM Coherent Star Network With Optical Signals Confined to Equally Spaced Frequencies," J. Lightwave Technol. 6(11):1770-1781
		Jackson, D.A. et al. (1993), "Simple multiplexing scheme for a fiber-optic grating sensor network" Opt. Lett. 18(14):1192-1194
		Jackson, D.A. et al. (1993), "Pseudoheterodyne Detection Scheme for Optical Interferometers" Electron. Lett. 18(25):1081-1083
		Kersey, A.D. et al., "Development of Fiber Sensors for Structural Monitoring," SPIE 2456:262-268
		Kersey, A.D. et al. (1993), "Multiplexed fiber Bragg grating strain-sensor system with a fiber Fabry-Perot wavelength filter," Opt. Lett. 18(16):1370-1372

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828

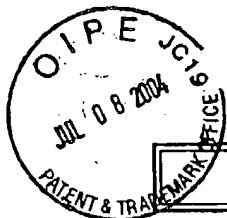
		Kersey, A.D. "Interrogation and Multiplexing Techniques for Fiber Bragg Grating Strain-Sensors," Optical Sciences Division Naval Research Laboratory (NRL) code 5674, distributed by NRL at SPIE Meeting Fall 1996, Denver, CO
		Kersey, A.D. et al. (1992), "High-Resolution Fibre-Grating Based Strain Sensor With Interferometric Wavelength-Shift Detection" Electron. Lett. 28(3):236-238
		Kersey, A.D. et al. (1993), "Fiber-optic Bragg grating strain sensor with drift-compensated high-resolution interferometric wavelength-shift detection" Opt. Lett. 18(1):72-74
		Martin, J. et al. (1997), "Use of a sampled Bragg grating as an in-fiber optical resonator for the realization of a referencing optical frequency scale for WDM communications," OFC '97 Technical Digest, pp. 284-285
		Melle, S.M. et al. (1993), "A Bragg Grating-Tuned Fiber Laser Strain Sensor System" IEEE Photon. Technol. Lett. 5(2):263-266
		Miller, C.M., "Characteristics and Applications of High Performance, Tunable, Fiber Fabry-Perot Filters," 41st ECTC Electronics Components & Technology Conf., Atlanta, GA, May 13-15, 1991, 4 pp.
		Rao, Y.-j. and Jackson, D.A. (1996), "Universal Fiber-Optic Point Sensor System for Quasi-Static Absolute Measurements of Multiparameters Exploiting Low Coherence Interrogation," J. Lightwave Technol. 14(4):592-600
		Rao, Y.-j. et al. (1996), "Strain sensing of modern composite materials with a spatial/wavelength-division multiplexed fiber grating network," Opt. Lett. 21(9):683-685
		Rao, Y.-j. et al. (1995), "Spatially-multiplexed fibre-optic Bragg grating strain and temperature sensor system based on interferometric wavelength-shift detection" Electron. Lett. 31(12):1009-1010
		Sakai, Y. et al. (1992), "Frequency Stabilization of Laser Diodes Using 1.51-1.55 μm Absorption Lines of $^{12}\text{C}_2\text{H}_2$ and $^{13}\text{C}_2\text{H}_2$," IEEE J. Quantum Electron. 28(1):75-81
		Weis, R.S. et al. (1994), "A Four-Element Fiber Grating Sensor Array with Phase-Sensitive Detection," IEEE Photon. Technol. Lett. 6(12):1469-1472
		Xu, M.-G. et al. (1993), "Novel frequency-agile interrogating system for fibre Bragg grating sensor," Proc. of the SPIE V. 2071, pp. 59-65

EXAMINER

DATE CONSIDERED


*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
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Title of Invention	Waferless fiber fabry-perot filters						
<div>Application Number: 10/686934 </div> <div>Confirmation Number: 4564</div> <div>First Named Applicant: Yufei Bao</div> <div>Attorney Docket Number: 113-02</div> <div>Search string: (5602949 or 5978539 or 5991483 or 5999671 or 6181851 or 6229827 or 6240220 or 6327036 or 4955025 or 4782491 or 4780877 or 4680767 or 5208886 or 4545644 or 4358851 or 4813756 or 4861136 or 4830451 or 4932033 or 5037179 or 4787701 or 4629284 or 4490007 or 4448482 or 4258977 or 5251275 or 5469455 or 5588013 or 5381426 or 5959753 or 6163553 or 5132976 or 5504771 or 6160627 or 5734667 or 5381230 or 5617434 or 4530097 or 5619368 or H0001813 or RE035962 or 4982406 or 5243610 or 5365539 or 5914978 or 5946438 or 5878065).pn.</div>							
US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5602949	1997-02-11	Epworth			
	2	5978539	1999-11-02	Davies			
	3	5991483	1999-11-23	Engelberth			
	4	5999671	1999-12-07	Jin			
	5	6181851	2001-01-30	Pan			
	6	6229827	2001-05-08	Fernald			
	7	6240220	2001-05-29	Pan			
	8	6327036	2001-12-04	Bao			
	9	4955025	1990-09-04	Mears			
	10	4782491	1988-11-01	Snitzer			
	11	4780877	1988-10-25	Snitzer			

	12	4680767	1987-07-14	Hakimi
	13	5208886	1993-05-04	Clayton
	14	4545644	1985-10-08	DeVeau, Jr.
	15	4358851	1982-11-09	Scifres
	16	4813756	1989-03-21	Frenkel
	17	4861136	1989-08-29	Stone
	18	4830451	1989-05-16	Stone
	19	4932033	1990-06-05	Miyazawa
	20	5037179	1991-08-06	Bertolin
	21	4787701	1988-11-29	Stenger
	22	4629284	1986-12-16	Malavieille
	23	4490007	1984-12-25	Murata
	24	4448482	1984-05-15	Lathlaen
	25	4258977	1981-03-31	Lukas
	26	5251275	1993-10-05	Kuriyama
	27	5469455	1995-11-21	Reitz
	28	5588013	1996-12-24	Reitz
	29	5381426	1995-01-10	Fontana
	30	5959753	1999-09-28	Duling
	31	6163553	2000-12-19	Pfeiffer
	32	5132976	1992-07-21	Chung
	33	5504771	1996-04-02	Vahala
	34	6160627	2000-12-12	Ahn
	35	5734667	1998-03-31	Esman
	36	5381230	1995-01-10	Blanke
	37	5617434	1997-04-01	Tamura
	38	4530097	1985-07-16	Stokes
	39	5619368	1997-04-08	Swanson
	40	H0001813	1999-11-02	Kersey
	41	RE035962	1998-11-17	Ball
	42	4982406	1991-01-01	Facklam
	43	5243610	1993-09-07	Murata
	44	5365539	1994-11-15	Mooradian
	45	5914978	1999-06-22	Welch
	46	5946438	1999-08-01	Minot
	47	5878065	1999-03-02	Delavaux